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Ethyl Acetate

SECTION 1: Identification of the substance/mixture and of the supplier

Product name : Ethyl Acetate

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: \$25305

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific 9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education 15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

SECTION 2: Hazards identification

Classification of the substance or mixture:





Flammable Liquid 2 Specific Target Organ Toxicity, Single Exposure 3 Eye irritation (Category 2A), H319

Signal word: Danger

Hazard statements:

Highly flammable liquid and vapour May cause drowsiness or dizziness Causes serious eye irritation

Precautionary statements:

If medical advice is needed, have product container or label at hand

Keep out of reach of children

Read label before use

Do not eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapours/spray

Use only outdoors or in a well-ventilated area

Use personal protective equipment as required

Keep away from heat/sparks/open flames/hot surfaces - No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/light/.../equipment

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Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Wash ... thoroughly after handling

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

In case of fire: Use ... for extinction

Rinse mouth

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Get Medical advice/attention if you feel unwell

Collect spillage

IF exposed or concerned: Get medical advice/attention

Store in a well ventilated place. Keep cool

Store in a well ventilated place. Keep container tightly closed

Dispose of contents and container to an approved waste disposal plant

Other Non-GHS Classification:

WHMIS



NFPA/HMIS





HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

| Ingredients: | | | |
|--------------|---------------|---------------------------|--|
| CAS 141-78-6 | Ethyl Acetate | >98.5 % | |
| | | Percentages are by weight | |

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists.

After skin contact: Wash affected area with soap and water. Rinse thoroughly. Seek medical attention if irritation, discomfort or vomiting persists.

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After eye contact: Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation, Nausea, Headache, Dizziness;

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents: If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. Foam. Carbon dioxide

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Advice for firefighters:

Protective equipment: Wear protective equipment. Use NIOSH-approved respiratory protection/breathing apparatus. Use spark-proof tools and explosion-proof equipment.

Additional information (precautions): Move product containers away from fire or keep cool with water spray as a protective measure, where feasible.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent. Transfer to a disposal or recovery container.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect spilled liquid for recovery, treatment or disposal.

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal.

Reference to other sections:

SECTION 7: Handling and storage

Precautions for safe handling:

Prevent formation of aerosols. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Avoid splashes or spray in enclosed areas. Wash hands before breaks and at the end of work.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well

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sealed containers. Keep container tightly sealed. Store in secure flammable storage area away from sources of ignition. Protect from freezing and physical damage.

SECTION 8: Exposure controls/personal protection







Control Parameters: 141-78-6, ethyl acetate, TWA 400 ppm US. ACGIH Threshold Limit Values

 $(01\ 2010)$

141-78-6, ethyl acetate, PEL 400 ppm 1,400 mg/m3 US. OSHA Table Z-1

Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Appropriate Engineering controls: Emergency eye wash fountains and safety showers should be available in

the immediate vicinity of use/handling.Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational

Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Use suitable respiratory

protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills,

respiratory protection may be advisable.

Protection of skin: The glove material has to be impermeable and resistant to the product/

the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and

the degradation.

Eye protection: Safety glasses with side shields or goggles.

General hygienic measures: The usual precautionary measures are to be adhered to when handling

chemicals. Keep away from food, beverages and feed sources.

Immediately remove all soiled and contaminated clothing. Wash hands

before breaks and at the end of work. Do not inhale

gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and

skin.

SECTION 9: Physical and chemical properties

| Appearance (physical state,color): | Clear, colorless liquid | Explosion limit lower: Explosion limit upper: | Lower explosion limit: 2.2 %(V) Upper explosion limit: 11.5 %(V) |
|------------------------------------|---------------------------------------|--|---|
| Odor: | Not determined | Vapor pressure: | 97.3 hPa (73.0 mmHg) at 20.0 °C (68.0 °F) |
| Odor threshold: | Not determined | Vapor density: | Not determined |
| pH-value: | Not determined | Relative density: | Not determined |
| Melting/Freezing point: | Melting point/range: -84 °C (-119 °F) | Solubilities: | Surface tension 24.0 mN/m at 20.0 °C (68.0 °F) |
| Boiling point/Boiling range: | 77 C | Partition coefficient (noctanol/water): | log Pow: 0.73 |

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| Flash point (closed cup): | -2.99 °C (26.62 °F) - closed cup | Auto/Self-ignition temperature: | 427.8 C |
|----------------------------------|-------------------------------------|---------------------------------|--|
| Evaporation rate: | Not determined | Decomposition temperature: | Not determined |
| Flammability (solid,gaseous): | Flammable | Viscosity: | a. Kinematic:Not determined b. Dynamic: Not determined |
| Density : Not determined | | | |

SECTION 10: Stability and reactivity

Reactivity:

Chemical stability: No decomposition if used and stored according to specifications.

Possible hazardous reactions:

Conditions to avoid:Store away from oxidizing agents, strong acids or bases.Ignition source. Excess heat. Incompatible materials. Open flame

Incompatible materials:Strong acids.Heat. Open flame. Sparks. Strong bases.Potassium dioxide. Acetyl bromide. Acetyl chloride. Bromine pentafluoride. Sodium. Platinum. Strong oxidizers

Hazardous decomposition products: Carbon oxides (CO, CO2). Acrid smoke and fumes. Irritating fumes

SECTION 11: Toxicological information

| Acute Toxicity: | |
|--|--|
| Oral: | LD50 Oral - Rat - 5,620 mg/kg |
| Inhalation: | LC50 Inhalation - Mouse - 2 h - 45,000 mg/m3 |
| Dermal: | LD50 Dermal - Rabbit - > 18,000 mg/kg |
| Chronic Toxicity: No additional information. | |
| Corrosion Irritation: | |
| Ocular: | May cause eye irritation. |
| Sensitization: | No additional information. |
| Single Target Organ (STOT): | No additional information. |
| Numerical Measures: | No additional information. |
| Carcinogenicity: | IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |
| Mutagenicity: | No additional information. |
| Reproductive Toxicity: | No additional information. |

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SECTION 12: Ecological information

Ecotoxicity

Toxicity to fish: LC50 - Oncorhynchus mykiss (rainbow trout) - 350.00 - 600.00 mg/l - 96 h **Toxicity to fish**: LC50 - Pimephales promelas (fathead minnow) - 220.00 - 250.00 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates: LC50 - Pimephales promelas (fathead minnow) -

220.00 - 250.00 mg/l - 96 h

Toxicity to algae : EC50 - Algae - 4,300.00 mg/l - 24 h

Persistence and degradability: Readily degradable in the environment. **Bioaccumulative potential**: - 3 d Bioconcentration factor (BCF): 30

Mobility in soil: Aqueous solution has high mobility in soil.

Other adverse effects:

SECTION 13: Disposal considerations

Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

SECTION 14: Transport information

UN-Number

1170

UN proper shipping name

Ethanol (Mixture)

Transport hazard class(es)



Class

3 Flammable liquids

Packing group: II

Environmental hazard:

Transport in bulk:

Special precautions for user:

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Reactive, Acute, Chronic, Fire

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients is listed

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients is listed

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

108-10-1 Methanol

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

64-17-5 Ethanol

Canadian NPRI Ingredient Disclosure list (limit 1%):

67-56-1 Methanol 67-63-0 2-Propanol 108-10-1 MIBK

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.Note:. The responsibility to provide a safe workplace remains with the user.The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment.The information contained herein is, to the best of our knowledge and belief, accurate.However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material.It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

PNEC: Predicted No-Effect Concentration (REACH)

CFR: Code of Federal Regulations (USA)

SARA: Superfund Amendments and Reauthorization Act (USA)

RCRA: Resource Conservation and Recovery Act (USA)

TSCA: Toxic Substances Control Act (USA)

NPRI: National Pollutant Release Inventory (Canada)

DOT: US Department of Transportation IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

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